Appln. No.: 10/554,028

Amendment Dated July 30, 2009

Reply to Office Action of June 18, 2009

Amendments to the Specification:

Please replace the paragraph beginning at page 6, line 2, with the following rewritten paragraph:

The invention having been generally described above, the accompanying figures will now be referenced in the discussion of a preferred embodiment of the invention, as set out in the examples which follow, in which:

Figure 1 shows the effect of LCO dose and timing on fruit set of Cobra tomatoes; (Same data as table 2)

Figure 2 shows the effect of LCO dose and timing on fruit number of Cobra tomatoes; (Same data as table 2)

Figure 3 shows the effect of LCO dose and timing on flower number of Cobra tomatoes; (Same data as table 1)

Figure 4 shows the effect of LCO dose and timing on flower number of Cobra tomatoes; (Same data as table 1)

Figure 5 shows the effect of LCO dose on number of flower of Cobra tomatoes; (Same data as table 3)

Figure 6 shows the effect of LCO dose on the number of fruit of Cobra tomatoes; (Same data as table 4)

Figure 7 shows the effect of LCO dose on yield of fruit of Cobra tomatoes; (Same data as table 5)

Figure 8 shows the effect of LCO on tomato plant flowering:

Figure 9 shows the effect of LCO on induction of flowering in Arabidopsis thaliana;

Figure 10 shows the effect of LCO on induction of flowering in Arabidopsis thaliana;

Figure 11 shows the effect of LCO dose on the yield of fruit per plant, in tomato plant application;—and (Combined with figure 13)

Fig. 2-1: LCO foliar application enhanced early flowering and total flower number in greenhouse tomatoes.

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- Fig. 2-2: LCO foliar application enhanced early fruiting and total fruit number in greenhouse tomatoes.
- Fig. 2.3: Effect of LCO application on earlier flowering and number of flowers in Marigolds.
- Fig. 2.4: Effect of LCO application on fruit number of strawberries.
- Fig. 2.5: Effect of LCO soil application on cherry tomato early fruit numbers.
- Fig. 2.6: LCO application promoted tomato early fruit number.
- Fig. 2.7: LCO application promoted tomato early fruit.
- Fig. 2.8: Cumulative harvested fruit number from tomato plants when 50ng/plant-LVO LCO was applied once at variable growing stages.
- Fig. 2.9: Cumulative harvested fruit yield from tomato plants when 50ng/plant LCO was applied once at variable growing stages.
- Fig. 2.10: Effect of LCO application on advancement of hot pepper early flowering.
- Fig. 2.11: Effect of LCO application on advancement of hot pepper fruiting.

Please replace the paragraph at page 12, last full paragraph, with the following rewritten paragraph:

In general, LCO induced early flowering in both experiments (Figures 9 and 10 and 11).

Please replace the paragraph at page 14, first full paragraph, with the following rewritten paragraph:

The trial results are presented in the following Figure 12 11 and Tables 6 and 7. The parameter of interest was ripened fruit which was harvested 2 or 3 times a week, recording each time, both fruit weight and number of fruit per set of replicates. It was known that fruit arise from pollinated flowers and that an increase in the one leads to the other. Figure 12 11 records cumulative harvested (red) fruit per treatment. For the single LCO application it will be seen that the 10 and 100 ng/plant treatments have advanced fruiting by some 10 days over control (horizontal separation in weeks). That advance has allowed the plant to bear and ripen more

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fruit over the season for these treatments (see Figure 12 11, note height over control and Tables 6 and 7 for actual weights and numbers harvested). Table 6 records harvested weight and numbers of ripened fruit over season and it can be seen that the average weight of the tomatoes is not different between treatments and control. Thus the increase in harvested weight was due to an increase in numbers harvested, in agreement with actual enumeration. Table 7 demonstrates that the yield increase over the season was a statistically significant 17% for single application of 10 ng LCO/plant and agrees with Table 6 where numbers for this application were similarly increased- some 20%.

Please replace the paragraph at page 14, penultimate paragraph, with the following rewritten paragraph:

From Figure 12 11 there is a shift to earlier flowering when plants are treated with LCOs at specific concentrations, the concentrations required for physiological change being typical of a phytohormone where a very narrow range of concentration at very low concentrations is of benefit-higher and lower concentrations have no effect.